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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/182,519	10/30/1998	LOUIS CAPORIZZO	GEN-020	2098

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EXAMINER

BUI, KIEU OANH T

ART UNIT	PAPER NUMBER
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2611

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4

Please find below and/or attached an Office communication concerning this application or proceeding.

[Handwritten signature]

Office Action Summary	Application No. 09/182,519	Applicant(s) CAPORIZZO ET AL.	
	Examiner KIEU-OANH T BUI	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-17 is/are rejected.
- 7) ☒ Claim(s) 8-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claims 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 8, the prior art of record fails to specifically teach or suggest a passthrough circuit as cited in claim 1 AND further including the step of “wherein the second signal path comprises: a channel surface acoustic wave filter, arranged to receive the tuned signal from the tuner and to filter the tuned signal to generate a filtered signal; an intermediate frequency strip, configured and arranged to amplify the filtered signal; a dual surface acoustic wave filter, configured and arranged to separate the amplified filtered signal into audio and video signal components; an audio and video amplifier, operatively coupled to the dual surface acoustic wave filter and configured and arranged to amplify the audio and video signal components; and an audio/video demodulator, configured and arranged to downconvert the amplified audio and video signal components to their respective baseband frequencies and to provide the downconverted audio and video signal components to the radio frequency modulator” as claimed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Robbins et al. (U.S. Patent No. 5,220,602/ or “Robbins” hereinafter).

Regarding claim 1, Robbins discloses a NICAM compatible television converter (the only Figure) for use in a cable television converter terminal, a passthrough circuit for passing a tuned signal from a tuner (item 12 of Figure) to a radio frequency modulator (RF summing circuit 62) for output to external equipment (RF output), the passthrough circuit arrangement comprising: a first signal path, arranged to receive the tuned signal from the tuner and to provide a NICAM signal component of the tuned signal to the radio frequency modulator, i.e., a first path is from the tuner 12 to IF 22 to a SAW IF filter 26 to an audio mixer 40 to NICAM 48 to AGC 50 and then mixer 60 to RF modulator 62 to provide RF outputs; and a second signal path, arranged to receive the tuned signal from the tuner and to provide at least one other signal component of the tuned signal to the radio frequency modulator, i.e., the second path is from the tuner 12 to IF 22 then to IF descramble 24 to SAW filter then to video and audio mixer 28, then to a linear descramble 52 and a video and audio modulator 58 to provide at least one other signal component of the tuned signal to RF modulator, which is a RF summing circuit 62, to provide RF output (see Figure, and col. 3/line 25 to col. 4/line 41).

As for claim 2, in further view of claim 1 above, Robbins reveals “wherein the first signal path comprises a NICAM surface acoustic wave filter, coupled to receive the tuned signal from the tuner and configured and arranged to pass a NICAM signal component of the tuned signal and to substantially reject non-NICAM signal components of the tuned signal”, i.e., a surface acoustic wave (SAW) filter 26 is used in the disclosed first path and to filter out only NICAM signal component of the tuned signal by the NICAM intercarrier filter 48 and reject non-NICAM signal components of the tuned signal by letting an FM audio intercarrier filter 42 to handle other non-NICAM signals (Figure, and col. 4/lines 3-23).

As for claim 3, in further view of claim 2 above, Robbins discloses “wherein the NICAM surface acoustic wave filter outputs a signal to a mixer which is set at a selected frequency using a crystal oscillator”, i.e., a local oscillator 38 is used to provide a predetermined and selected frequency at the output signal at the SAW filter (col. 3/lines 49-67).

With respect to claim 4, in further view of claim 1 above, Robbins reveals “wherein said first signal path comprises an alignment-free filter coupled to receive the tuned signal from the tuner and configured and arranged to pass a NICAM signal component of the tuned signal and to substantially reject non-NICAM signal components of the tuned signal”, i.e., the NICAM intercarrier 48 is only served for this purpose (col. 4/lines 3-18).

As for claims 5 and 6, in further view of claim 2 above, Robbins discloses “wherein the first signal path further comprises a mixer, coupled to receive the NICAM signal component passed by the NICAM surface acoustic wave filter, and configured to downconvert the NICAM signal component to a baseband NICAM IF frequency” and “wherein the NICAM IF frequency is one of 6.552 MHZ and 5.85 MHZ”, i.e., a mixer 40 is used right after a SAW filter 26 and to downconvert the NICAM signal to a baseband NICAM IF frequency of 6.552 MHZ and 5.85 MHZ (col. 3/lines 60-67).

Regarding claim 16, this claim for “a signal processing circuit in which a first component of a signal is separately processed, the processing circuit comprising: a first signal path connected between an input terminal and an output terminal, said first signal path including a first processing circuit for processing said signal and providing a first processed signal to said output terminal; and a second signal path connected between said input and output terminals, said second signal path comprising a alignment-free filter for passing substantially only said first component of said signal and a second processing circuit for processing said first component of said signal and providing a second processed signal to said output terminal” are rejected for the reasons given in the scope of claims 1 and 4 as already discussed in details above.

As for claim 17, in further view of claim 16, Robbins discloses “wherein said signal is an audiovisual signal and said first component is a NICAM digital audio signal” (see Figure, and col. 3/line 30 to col. 4/line 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 7 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins et al (U.S. Patent No. 5,220,602).

Regarding claim 7, in further view of claim 5 above, Robbins does not show the step of “wherein the first signal path further comprises a low pass filter, coupled to receive the downconverted NICAM signal component from the mixer and configured and arranged to attenuate mixer harmonics from the downconverted NICAM signal and to provide a NICAM output signal to the radio frequency modulator”; however, the Examiner takes an Official Notice that a LPF is being well-known as a device to place in a circuit for cutting frequencies off above a certain point and allowing other frequencies to pass. It serves a minimum impact in this scenario, because Robbins teaches an alternative way to handle NICAM signal by using an AGC 50 and a mixer 60 in order to provide RF outputs (col. 4/lines 3-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Robbins’s circuit with a known device as a LPF in order to handle NICAM signal. The motivation for placing a LPF here is to eliminate certain frequencies before the NICAM signals reaches the RF modulator as preferred.

As for claim 10, in further view of claim 1 above, Robbins does not teach “wherein the first signal path is constructed as a unitary circuit module”; however, the Examiner takes an Official Notice that it is a simply design choice whether to construct that path as “a unitary circuit module” or not. Therefore, it would have been obvious to one of ordinary skill in the art to modify Robbins’s circuitry of the discussed first path to handle NICAM signal as “a unitary circuit module” as a circuitry within a module as a convenience manner to place and replace that module, if needed, as preferred.

Regarding claims 11-15, these claims for a passthrough circuit “for use in a cable television converter terminal, a passthrough circuit for passing a tuned signal from a tuner to a radio frequency modulator for output to external equipment, the passthrough circuit arrangement comprising: a NICAM surface acoustic wave filter, coupled to receive the tuned signal from the tuner and configured and arranged to pass a NICAM signal component of the tuned signal and to substantially reject non-NICAM signal components of the tuned signal; a mixer, coupled to receive the NICAM signal component passed by the NICAM surface acoustic wave filter, and configured to downconvert the NICAM signal component to a baseband NICAM IF frequency; and a low pass filter, coupled to receive the downconverted NICAM signal component from the mixer and configured and arranged to attenuate mixer harmonics from the downconverted NICAM signal and to provide a NICAM output signal to the radio frequency modulator” as well as “wherein the selected frequency is one of 45.75 MHZ and 38.9 MHZ” (Robbins, col. 3/lines 30-47) are rejected in the scope of claims 1-7 and 10 as already disclosed above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Robins et al. (U.S. Patent No.6,147,713) disclose a digital signal processor for multistandard television reception.

Hailey, Sr. et al. (U.S. Patent No.5,502,496) disclose an apparatus for providing audible instructions or status information for use in a digital television signal.

Johnson et al. (U.S. Patent No.5,309,514) disclose a pulse generator including a memory for storing pulses for modulation on a carrier of a television signal.

Dinsel (U.S. Patent No.5,325,127) discloses a process for transmitting digital data, in particular sound data, in TV channel.

Sakai et al (U.S. Patent No.5,138,457) disclose a television receiver having a system for reducing interference of a first audio signal carrier to a second audio signal carrier.

Mehrgardt et al. (U.S. Patent No.5,202,766) disclose sound channel circuit for digital television receivers.

Jonnalagadda (U.S. Patent No.5,029,003) discloses an apparatus for incorporating digital signals with a standard TV signal.

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for Technology Center 2600 only)

Art Unit: 2611


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Krista Bui
Art Unit 2611
August 14, 2002


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600